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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,613	03/09/2004	Brian Zambrowicz	07705.0001-01000	3971

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EXAMINER	
CHEN, SHIN LIN	
ART UNIT	**PAPER NUMBER**
1632	

MAIL DATE	DELIVERY MODE
09/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 10/797,613	**Applicant(s)** ZAMBROWICZ ET AL.	
	Examiner Shin-Lin Chen	**Art Unit** 1632	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 13 August 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.
   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☒ Applicant's reply has overcome the following rejection(s): See Continuation Sheet.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: *None*.
   Claim(s) objected to: *None*.
   Claim(s) rejected: *34,35 and 40-45*.
   Claim(s) withdrawn from consideration: *21-33*.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

S/ Chen

Shin-Lin Chen
Primary Examiner
Art Unit: 1632

Continuation of 5. Applicant's reply has overcome the following rejection(s): double patenting rejection and 35 U.S.C. 112 second paragraph rejection.

Continuation of 11. does NOT place the application in condition for allowance because: Applicants argue that methods of making transgenic and chimeric mice by using mutated ES cells were known in the art, and not everything necessary to practice the invention need be disclosed and considerable amount of experimentation is permissible. Applicants further cite reference Hawkins, Link and Jones, and argue that the produced transgenic mouse has an identified genotype and it can be used to determine the effect of a particular genetic mutation on the efficacy of a drug (amendment, p. 13-16). This is not found persuasive because of the reasons of record. The claims encompass making a somatic transgenic mouse or a germ line transgenic mouse comprising a vector comprising a 3' gene trap cassette by introducing said vector into murine embryonic stem (ES) cells and selecting a murine ES cell comprising said vector. The specification fails to provide adequate guidance and evidence for how to use the produced somatic transgenic mouse or a germ line transgenic mouse for the study of basic biological processes and the development of therapeutics and diagnostics for diseases. 3' gene trap vector is designed to integrate into introns or genes such that the gene integrated is over-expressed, silenced, or under-expressed, and a fusion protein encoded by the exon sequence in the vector and the exon sequence of the integrated gene is expressed. The claimed method involves integrating 3' gene trap vector into unknown gene in mouse genome to create numerous unknown mutated genes that results in different transgenic mice or chimeric mice. Therefore, it is more likely than not that the resulting genotype of the transgenic mice or chimeric mice is unknown because it is not known what gene is integrated into by the 3' gene trap vector. Although it was known in the art to use various selectable markers, promoters, and vectors for making a transgenic mouse, however, the resulting phenotype of a transgenic mouse or a chimeric mouse was unpredictable at the time of the invention. Even if the genotype of a transgenic or chimeric mouse is known, it was unpredictable at the time of the invention whether a somatic transgenic (chimeric) mouse or a germ line transgenic mouse could be made by using the claimed method and whether there is any phenotype of the transgenic mouse produced by the claimed method. The claimed method must have a use, for example, producing a transgenic mouse having a phenotype for screening a drug. The transgenic mouse produced by the claimed method must have a use. It is unclear whether a somatic transgenic mouse or a germ line transgenic mouse could be made by using the claimed method and whether there is a genetic mutation of gene(s) or any phenotype of the transgenic mouse produced by the claimed method. Absent a genetic mutation of a gene or a phenotype of the transgenic mouse, one skilled in the art would not know how to use the transgenic mouse produced by the claimed method, for example, to determine the effect of a particular genetic mutation on the efficacy of a drug. Thus, one skilled in the art at the time of the invention would require undue experimentation to practice over the full scope of the invention claimed. The cited references do not use a 3' gene trap cassette to make transgenic mice and they fail to provide evidence for what kind of transgenic mice can be produced by using the claimed method and how to use said produced transgenic mice to determine the effect of a particular genetic mutation on the efficacy of a drug. The mice used in the cited reference have their own phenotypes such that they can be used for the particular purpose in the cited reference. However, it was unpredictable at the time of the invention whether a somatic transgenic mouse or a germ line transgenic mouse could be made by using the claimed method and whether there is any phenotype of the transgenic mouse produced by the claimed method. If there is a phenotype, the resulting phenotype of the transgenic mouse or chimeric mouse is unpredictable and it is unclear whether it is distinguishable from the wild type mouse or not. Applicants argue that is it irrelevant whether the cited reference used a 3' gene trap vector to make transgenic mice. The specification and art of record enable the claimed method of making a transgenic mouse having an identified genotype, and the cited references Hawkins, Link, and Jones demonstrate the use of such transgenic mice (amendment, p. 16). This is not found persuasive because of the reasons of record and the reasons set forth above. Applicants argue that one skilled in the art could use the transgenic mouse having an identified genotype produced by the claimed method to determine the efficacy of a drug, and the phenotype is not required in order to use the transgenic mouse. Determination of the efficacy of a drug may provide phenotypic information and other valuable information (amendment, p. 17). This is not found persuasive because of the reasons of record and the reasons set forth above. Phenotype, rather than a genotype, of a transgenic mouse or a chimeric mouse is required for the use of said mouse to determine the funstion of the mutated gene and the efficacy or mechanism of a drug. Absent the phenotype, one skileld in the art would not know how to use the transgenic or chimeric mouse produced by the claimed method of the instant invention.